



**Parks, Recreation
and Historic Preservation**

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

July 28, 2016

Via Email and Regular Mail

Lisa Kim Pelcyger
Ground Water Compliance Section, USEPA
290 Broadway, 20th Floor
New York, NY 10007-1866
Email: kim.lisa@epa.gov

Re: USEPA SDWA-UIC-IR-14-001
New Installation/Closure Plan for Hither Hills State Park Preserve, NYSOPRHP

Dear Ms. Pelcyger:

Attached please find the UIC New Installation/Closure Plan for the Hither Hills State Park Preserve on Long Island. The plan is being submitted to meet the requirements promulgated under the Safe Drinking Water Act regulations for new installations (40CFR Part 144.83) and for injection well closures (40 CFR Part 144.89). The New York State Office of Parks, Recreation & Historic Preservation plans to upgrade all large capacity and non-large capacity cesspools to sanitary systems with appropriately-sized septic tanks and leaching areas, decommission and close sanitary systems no longer in use, and install new systems with septic tanks and leaching areas.

All work will proceed in accordance with the USEPA Region 2 Guidance Document, Instructions for Class V Remediation Closure Plan dated March 16, 2015, and New York State DEC requirements for installation of new sanitary systems. Upon completion of construction, a "Final Remediation/Closure Plan" and updated EPA inventory forms will be submitted to document the final site as-built conditions.

If you have any questions regarding the plan, please do not hesitate to contact me at 631-321-3533 or scott.fish@parks.ny.gov, or Thomas LaGuardia, PE at Cashin Associates, PC at 631-348-7600 or tlaguardia@ca-pc.com.

Very truly yours,

Scott Fish
Capital Facilities Regional Manager II, NYSOPRHP

cc: Paul J. Laudato, General Counsel, NYSOPRHP (via email)
Kathleen L. Martens, Supervising Attorney NYSOPRHP (via email)
Joe Sun PhD, NYS Department of Environmental Conservation
Gregory T. Greene, Cashin Associates, P.C.
Thomas LaGuardia, PE, Cashin Associates, P.C.

DRAFT

SANITARY SYSTEMS NEW INSTALLATION/CLOSURE PLAN

HITHER HILLS STATE PARK



Prepared For:

New York State Office of Parks, Recreation and Historic Preservation
Long Island Region
Belmont Lake State Park

Submitted to:

EPA Region 2
Ground Water Compliance Section
290 Broadway, 20th Floor
New York, NY 10007-1866

Prepared By:

Cashin Associates, P.C.
1200 Veterans Memorial Highway
Hauppauge, NY 11788

July 2016

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**Hither Hills State Park
New Installation/Closure Plan for Class V
Underground Injection Wells**

Location: Hither Hills State Park
164 Old Montauk Highway
Montauk, New York 11954

Contact Person: Scott Fish, P.E.
Capital Facilities Regional Manager
New York State Office of Parks, Recreation and Historic Preservation
Long Island Region
Belmont Lake State Park
P.O. Box 247
Babylon, NY 11702-0247
631-321-3533

DESCRIPTION OF PARK

Hither Hills State Park offers visitors scenic picnic areas and fireplaces, sport fishing, a sand ocean beach, playing fields, a playground and a 168-site campground on the ocean. Anglers can fish year-round and obtain permits to fish at night. The unique “walking dunes” of Napeague Harbor are located on the eastern boundary of the park, which also has woodlands filled with Russian olive, oak, shad and pine trees. Bridle paths and hiking, nature, biking and cross-country ski trails are available.

DESCRIPTION OF WORK

Attachment 1 is a spreadsheet showing both the new work and planned injection well closure at Hither Hills State Park. The work consists of upgrading large capacity cesspools to code compliant septic systems, repairing or replacing septic tanks that no longer function correctly, upgrading all other cesspool system to septic systems, and decommissioning and closure of systems no longer in use. The closure of on-site systems will be performed in accordance with EPA Region 2 Underground Injection Control (UIC) Program Instructions for Class V Remediation/Closure Plans (March 16, 2015).

PROCEDURES PURSUANT TO EPA REGION 2

A. Site Schematic

A site plan is attached (Attachment 2) showing all buildings on the site and all sanitary outfalls (outfalls 1 through 15). A description of the work planned at each outfall is found in Attachment 1. The plans and specifications associated with the new installation and decommissioning of the systems no longer needed will be submitted to the New York State, Department of Environmental Conservation (NYSDEC) Region 1 for approval before proceeding with the work. Construction is anticipated to begin in the spring of 2017 and be completed in the Winter of 2018.

B. Description of Business

Hither Hills State Park offers camping, biking, fishing, hiking, paddle boarding, wind surfing, four wheel drive beach access along with many planned recreational programs for the parks' visitors. It has more than a quarter of a million visitors each year.

C. Description of Fluids Injected

The on-site systems treat only sanitary human waste. No known drains which could permit chemicals or industrial waste to enter the sanitary waste are connected to these systems.

D. Connection Between Drains and Injection Wells

The engineering firm of Cashin Associates, P.C. (CA) 1200 Veteran's Memorial Highway, Hauppauge, NY 11788, assisted by a utility mark out company, and verified connection of all drains to the subject injection wells. They utilized visual inspection, dye tests and ground penetrating radar to determine drain locations.

E. Description of Permanent Closure

Attachment 3 is a detailed specification for closure of injection wells associated with the on-site sanitary systems.

F. Contaminant Removal

While we do not expect to encounter hazardous waste/soils based on our investigations, if they are encountered all waste/contaminated soils will be removed from in and around the cesspools until visibly clean soil is reached. Removal will be by excavation. Disposal of the waste will follow the requirements of 6 NYCRR Part 360. Note that Attachment 5, Section 21500 of the specification requires both visual inspection and the use of a PID hand-held VOC monitor at each injection well. Liquid wastes will be removed by a Suffolk County licensed hauler and disposed at a licensed scavenger waste facility.

G. On-site Storage of Excavated Material

On-site storage of material found to be hazardous will be in tarp covered roll off containers until disposal.

H. Waste characterization

We reference section II – A.1 of USEPA Region 2 UIC Program Instructions, “Large capacity cesspools that have received only sanitary waste”. From the Region 2 Instructions, which discuss well specific sampling requirements, “Large Capacity” means serves or designed to serve 20 or more people per day. The cesspools must be pumped out and the wastes must be disposed of properly by a licensed hauler. Excavation, end-point sampling and analysis are typically not required. The waste/fluids that entered the Class V wells previously were untreated sanitary waste containing human excreta. Thus no testing will be conducted, other than visual inspection and use of a hand-held VOC monitor.

I. Backfill

Sites will be backfilled with clean inert sand.

J. Final Report

A Final Remediation/ Closure Report will be issued upon completion of the construction project closing the subject class V wells. In addition updated EPA Inventory Forms will be submitted based on as-built drawings of the construction. Construction is expected to be completed in the Winter of 2018. The reports will be sent to:

Chief
Ground Water Compliance Section
U.S. Environmental Protection Agency
290 Broadway, 20th Floor
New York, NY 10007-1866

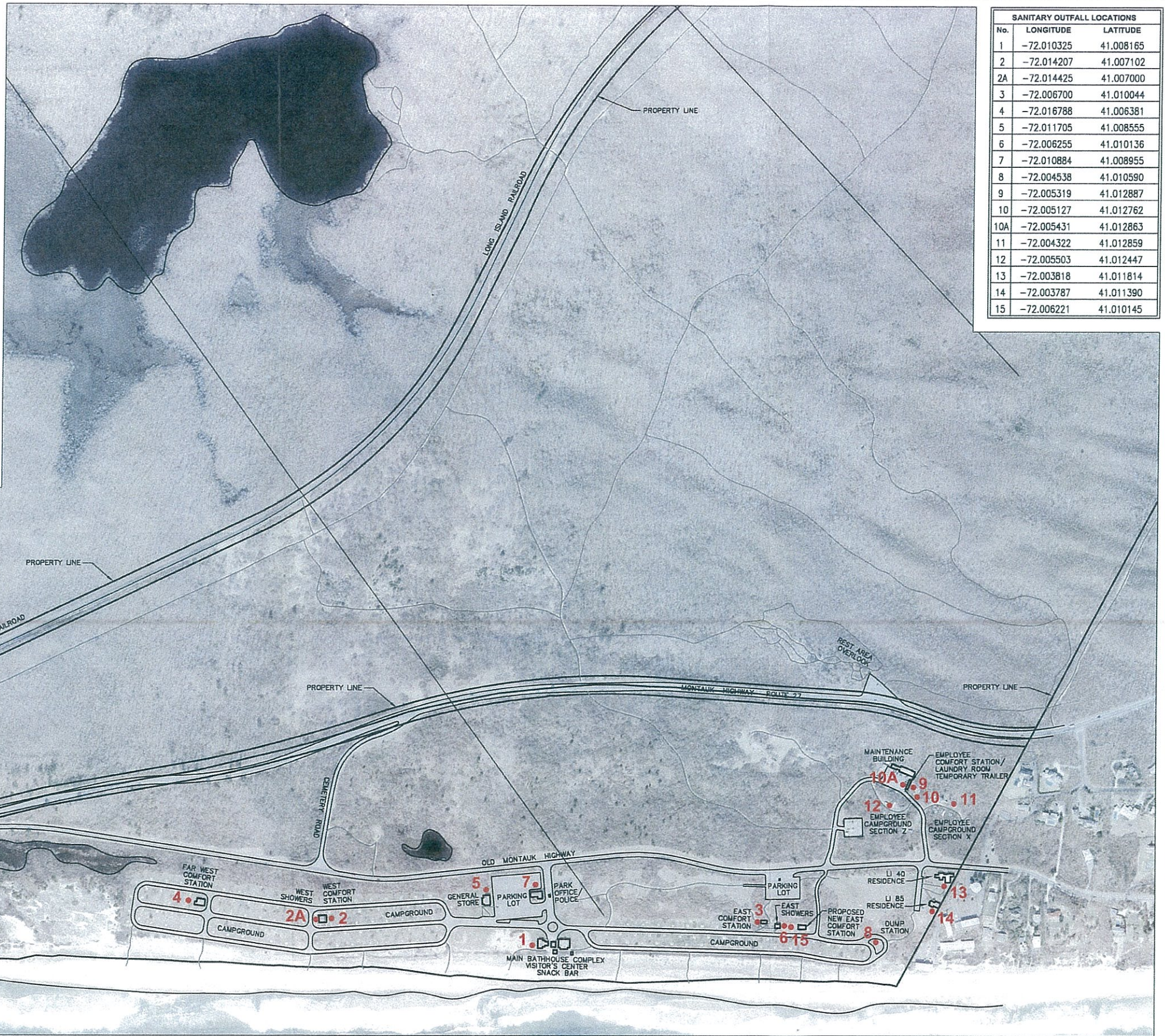
Attachment 1

WORK PLAN

Hither Hills State Park - Design Basis / Work Summary & SPDES Inventory											7/5/2016
Original Outfall #	New SPDES #	Location	Original SPDES Design Flow Gallons/ Day	New SPDES Design Flow Gallons/ Day	Flow Basis	Septic Tank	Grease Trap	Pump Station	Leaching Area	Leaching Configuration	Comments
1	001	Main Bath House Complex/ Visitor's Center/ Snack Bar	4,110	4,110	Existing Approvals	Existing			Existing		No change
2	002	West Comfort Station	4,000	4,260	Assume 71 campsites with 6 people each SCDHS Stds. 10 gpd/p x 213 people = 4260 gpd	9000gal 2 - 12 ft. dia. x 6 ft. eff.	N/A	N/A	2,840 sf	27 - 4ft galleys arranged in 2 rows	Pump, close and remove existing septic tank. Install new septic tank and leaching galleys in lawn area. Relocate shrubbery. Relocate water spigot & drain. Backfill and restore site.
2A	003	West Showers	1,350	2,130	Assume 71 campsites with 6 people each SCDHS Stds. 5 gpd/p x 213 people = 2130 gpd	4500gal 12 ft. dia.x 6 ft. eff.	N/A	N/A	420 sf	4 - 4ft galleys arranged in 2 rows	Pump, close and remove existing dry well. Install new septic tank and leaching galleys in lawn area. Relocate shrubbery. Backfill and restore site.
3	N/A	East Comfort Station	4,000	N/A	Building to be Abandoned						Pump, close and abandon septic tank, leaching pools and sewer lines. Backfill and restore site.
4	004	Far West Comfort Station	6,000	4,230	Assume 47 campsites with 6 people each SCDHS Stds. 10gpd/p + 5gpd/p = 4230 gpd	9000gal 2 - 12 ft. dia. x 6 ft. eff.	N/A	N/A	2,820 sf	27 - 4ft galleys arranged in 2 rows	Pump, close and remove existing septic tank and leaching pools. Install new septic tank and leaching galleys in lawn area. Relocate shrubbery. Backfill and restore site.
5	005	General Store	1,350	300	SCDHS Stds. Approx 1920sf x .03gpd Kitchen: .12gpd x 1920sf	1,200 gal 8ft. Dia x 4ft eff	1,500 gal 8ft. Dia x 5ft eff	N/A	Existing	Existing	Pump, close and remove existing dry wells and sewer lines. Install new grease trap and septic tank. Connect new septic tank to existing leaching pool. Install cover to grade on existing leaching pool. Backfill and restore site. Restore pavement in kind with adjacent.
6	N/A	East Showers	1,350	N/A	Building to be Abandoned						Pump, close and abandon cesspools and sewer lines. Backfill and restore site.
7	007	Park Office / Police	1,400	110	SCDHS Stds Approx 1,800 sf x 0.06 gpd/sf (office) = 110 gpd	Existing			Existing		No change
8	008	Campground Dump Station	3,500	1,500	1/2 Septic Tank Gallons pumped during initial study.	Existing			Existing		No change
9	009	Maintenance Building	1,350	755	SCDHS Stds. Approx 4250 sf x .04gpd = 170 gpd + trailer below.	1,500 gal 8ft. Dia x 5ft eff	N/A	N/A	596 sf		Disconnect and abandon sewer line. Pump, close and abandon cesspool. Reroute plumbing in basement to new location. Seal openings in foundation where pipe is removed. Install trap, vent, sewer line, septic tank and leaching pools. Backfill and restore site. Restore pavement in kind with adjacent.
10	N/A	Employee Comfort Station/ Temporary Trailer	1,200	N/A	13 campsites with 3 people each SCDHS Stds. (Included in 009) 15 gpd/p x 39 people = 585 gpd						Pump, close and abandon cesspools and sewer lines. Reroute plumbing. Install new sewer line to septic tank for outfall 009. Backfill and restore site.
10A	N/A	Employee Laundry Room / Temporary Trailer	300	N/A	(Included in 009)						Pump, close and abandon cesspools and sewer lines. Reroute plumbing. Install new sewer line to septic tank for outfall 009. Backfill and restore site.
11	011	Employee Campground - (East)	600	315	7 campsites with 3 people each SCDHS Stds. 15 gpd/p x 21 people = 315 gpd	1,200 gal 8ft. Dia x 4ft eff				2 - 8 ft. Dia x 7 ft. Eff depth leaching pools	Pump, close and abandon 7 cesspools. Remove sewage inlet valves and piping. Remove water lines as indicated. Install new septic tank and leaching pools. Install new sewer lines, inlet valves, water main in kind with existing, water valves & spigots. Backfill and restore site.
12	012	Employee Campground - (South)	600	270	6 campsites with 3 people each SCDHS Stds. 15 gpd/p x 18 people = 270 gpd	1,200 gal 8ft. Dia x 4ft eff			350 sf	2 - 8 ft. Dia x 7 ft. Eff depth leaching pools	Pump, close and abandon 7 cesspools. Remove sewage inlet valves and piping. Remove water lines as indicated. Install new septic tank and leaching pools. Install new sewer lines, inlet valves, water main in kind with existing, water valves & spigots. Backfill and restore site.
13	013	LI 40 Residence	300	300	SCDHS Stds - Single Family Residences	1200gal 8ft. Dia x 4 ft. eff	N/A	N/A	200 sf	1 - 8ft. Dia x 8ft. Eff depth leaching pools	Pump, close and remove existing cesspools, leaching pools. Install septic tank and leaching pool. Backfill and restore site.
14	014	LI 85 Residence	300	300	SCDHS Stds - Single Family Residences	Existing	N/A	N/A	Existing	Existing	Pump, close and remove existing cesspools, leaching pools. Install septic tank and leaching pool. Backfill and restore site.
15	006	East Comfort Station	4500	4,500	2013 Approved Plans	Existing	N/A	N/A	N/A	N/A	No change
-	010	Far East Comfort Station	-	2,070	2015 Construction Plans	Existing	N/A	N/A	N/A	N/A	No change

Attachment 2

SITE PLAN OUTFALL LOCATIONS



SANITARY OUTFALL LOCATIONS		
No.	LONGITUDE	LATITUDE
1	-72.010325	41.008165
2	-72.014207	41.007102
2A	-72.014425	41.007000
3	-72.006700	41.010044
4	-72.016788	41.006381
5	-72.011705	41.008555
6	-72.006255	41.010136
7	-72.010884	41.008955
8	-72.004538	41.010590
9	-72.005319	41.012887
10	-72.005127	41.012762
10A	-72.005431	41.012863
11	-72.004322	41.012859
12	-72.005503	41.012447
13	-72.003818	41.011814
14	-72.003787	41.011390
15	-72.006221	41.010145

Cashin Associates, P.C.
ENGINEERING • PLANNING • CONSTRUCTION MANAGEMENT
1200 Veterans Memorial Highway • Hauppauge, New York 11788 • 631.348.7600
80 SW 8th St, Ste 2809 • Miami, Florida 33130 • 305.579.2006

NO.	DATE	DESCRIPTION

STATE OF NEW YORK
OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION
HIITHER HILLS STATE PARK
SANITARY SYSTEMS INSPECTION

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM ON THIS DRAWING IN ANY WAY. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL APPLY TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

DATE	DEC. 2013
DESIGNED BY	N.A.
DRAWN BY	R.J.W.
CHECKED BY	M.C.
SCALE	1"=200'

SITE
PLAN
OUTFALL
LOCATION

12035-014
DRAWING NUMBER
1
SHEET 1 OF 1

PRINT: 06/19/14 5:59pm X:\STATE OF NEW YORK\12035-022 STATE PARKS CLEAN WATER VULNERABILITY\HIITHER HILLS STATE PARK\SETON AERIAL SITE PLAN.dwg

Attachment 3

UNDERGROUND INJECTION CONTROL STRUCTURE CLOSURE SPECIFICATIONS

SECTION 021500
UNDERGROUND INJECTION CONTROL STRUCTURE CLOSURE

PART 1 - GENERAL

1.1 DESCRIPTION

A. Scope of Work:

1. The Contractor shall furnish all labor, materials, supplies, equipment, power, facilities and incidentals necessary to properly close existing underground injection control (UIC) structures located throughout the site, as shown on the Drawings. Work includes, but is not limited to, removal and disposal of standing liquids within the structures, removal of sludge and soil from the bottom of the structures, collection and analysis of endpoint sample(s) from the bottom of the structures, and backfilling and sealing the structures.
2. Closure of the Underground Injection Control (UIC) structures must be conducted in accordance with all applicable federal, state and local regulations with sampling only where directed by the Engineer, or as indicated on the drawings, and the approved UIC Closure Plan, as provided by the Owner.
3. The work shall include removal of all materials regardless of type, character, composition, weight, size or condition.
4. All waste generated during completion of the Work shall be managed in accordance with Section 021300, Waste Transportation and Disposal, and all applicable federal, state and local regulations.
5. The Work shall include all temporary means to manage and control storm water discharge, and prevent siltation and sedimentation of existing storm water management systems during the performance of the Work.
6. The Contractor shall examine the areas and conditions under which Work shall be performed. The Contractor shall correct all conditions detrimental to proper and timely completion of the Work and shall not proceed until unsatisfactory conditions have been corrected. The Contractor shall immediately notify the Owner of any perceived differences in existing conditions which may impact the Work.
7. At all times during closure activities, the Contractor shall provide equipment and facilities to remove all generated wash water. The Contractor shall be responsible for excavating and backfilling, in accordance with these Specifications, any soil contaminated due to improper containment of wash water at no additional expense to the Owner.

8. Contractor shall have a PID hand held VOC Monitor, Mini RAE Lite Model PGM-7300 or equivalent, on site to monitor all open excavations before backfilling.

B. Related Work Specified Elsewhere:

1. Section 026100, "Storage, Handling, Transportation And Disposal Of Petroleum-Contaminated Material And/Or Hazardous Wastes"

1.2 SUBMITTALS

A. UIC Closure Procedures:

1. Contractor shall submit closure procedures to the Engineer for approval. The procedures shall specify all procedures, equipment, materials and manpower which will be utilized to close each respective UIC structure.

1.3 PERMITS AND REGULATIONS

- A. The Contractor shall prepare all required submittals and obtain all necessary permits and approvals and pay all fees for the Work as required by federal, state and local agencies, including the New York State Department of Environmental Conservation (NYSDEC) and the United States Environmental Protection Agency (USEPA) as applicable.
- B. The Contractor shall perform all Work in strict compliance with all applicable requirements of governing authorities having jurisdiction, including NYSDEC and the USEPA as applicable.
- C. The Contractor is advised that all excavation work shall be in strict compliance with Occupational Safety and Health Administration (OSHA), Title 29, Code of Federal Regulations 1926, Subpart P: Excavation and Industrial Code Rule 23 as established by the New York State Department of Labor.

1.4 MANAGEMENT OF LIQUID WASTE

- A. The Contractor shall be responsible for collecting, managing and disposing of all water and liquid waste present within the UIC structure at the beginning of construction, and any water and liquid waste entering the UIC structure as a result of construction activities. This includes, but is not limited to, water resulting from maintaining excavations, cleaning the UIC structures and any storm water.
- B. At all times during construction, the Contractor shall provide equipment and facilities to remove all water entering excavations from any sources. All excavations shall be kept dry so as not to impede construction or result in damage or loss of integrity of any complete Work.

- C. The Contractor shall provide and maintain pumps, sumps, suction and discharge lines, dikes, berms or other controls as necessary to convey liquids away from the excavations. Control devices shall not be removed until disturbed areas are restored or as approved by the Engineer or the Owner.

PART 2 - PRODUCTS - (NOT USED)

PART 3 - EXECUTION

- A. The Contractor shall notify the Engineer, NYSDEC, and the USEPA at least 5 days prior to any field work related to UIC structure closure.
- B. The Contractor shall give special attention to the buildings and structures that are in close proximity of the Work and shall implement all necessary measures to prevent damage to property. Damage to buildings or structures, not scheduled for demolition shall be repaired at the Contractor's expense.
- C. The Contractor shall completely secure any open UIC structures and excavation at the conclusion of the Work or at the end of the day, whichever is sooner. The cover shall be weather-tight and prevent infiltration of storm water and drainage water, and prevent the release of vapors and odors. The cover shall be positioned to shed precipitation, storm water runoff and drainage water. Open UIC structures and excavations shall be barricaded with safety fencing, signs and other means as required by federal, state and local laws and regulations.
- D. The Contractor shall prevent the release of vapors, odor and dust originating during excavation of the UIC structures, removal of liquid, sediment and soil from the UIC structures, loading materials and any other operations required by this Contract.

3.1 DRY WELL/CESSPOOL CLOSURE

- A. The Contractor shall remove the cover, frame, stack, dome, debris, and soil in the vicinity of the dry well/cesspool to completely expose the top of the dry well/cesspool.
- B. The Contractor shall remove the dome, top slab and/or "stack" of the dry well/cesspool, including the manhole rims and covers, if present, to provide an open excavation which extends from ground surface to the bottom of the dry well/cesspool.
- C. All liquids and sludge shall be removed from the dry well/cesspool to the existing sediment surface and placed immediately into approved liquid waste hauling vehicles for off-site disposal.
- D. Where directed by the Engineer, the interior walls of the dry well/cesspool shall be power washed by the Contractor. The Contractor shall collect, characterize, remove and dispose of all soil, sludge, sediment, debris, wastewater, wash water and residuals from within the dry well/cesspool. In power washing the dry well, the

Contractor shall minimize the generation of wastewater and maximize the capture of the wash water.

- E. Where directed by the Engineer, excavation of the soil beneath the dry well/cesspool shall be accomplished as specified by Section 310000, Earthwork, to the horizontal extent of the inside of the rings of the dry well/cesspool and as approved by the Engineer.
- F. Excavation of any visually stained soil or soil exhibiting elevated PID readings shall be accomplished as specified in Section 310000, Earthwork, as directed by the Engineer. All contaminated soil excavated shall be disposed off-site in accordance with Section 021300, Waste Transportation and Disposal.
- G. The Contractor shall be responsible for all structural support, bracing, shoring, backfilling etc., necessary to prevent damage, to nearby structures scheduled to remain.
- H. The contractor shall either remove the dry well/cesspool structure or abandon it in place as directed on the drawings.
- I. Where directed by the Engineer, an endpoint sample shall be collected from the bottom of the excavation, as specified by Section 016520, Sampling Plan. No backfilling shall take place until approval of the endpoint sampling results by the Owner and, as applicable, the USEPA and NYSDEC. There shall be no claims for changes in Contract Time or Contract Price as a result of the Owner's, Engineer's, USEPA's or NYSDEC's review of endpoint sample results. Should the Contractor backfill the excavation prior to the approval of the endpoint sample results to maintain the integrity of the excavation, such work is at the Contractor's risk. Should additional excavation be required, all such backfill shall be removed and handled, as directed by the Engineer, at no additional cost to the Owner.
- J. Once the Contractor has obtained approval of the endpoint sample results, the dry well/cesspool excavation shall be backfilled. Backfill and compaction shall be completed in accordance with the requirement specified in Section 310000, Earthwork.

3.2 MANHOLE CLOSURE

- A. The Contractor shall remove the cover, frame, stack, dome, debris, and soil in the vicinity of the manhole to completely expose the top of the manhole.
- B. The Contractor shall remove the dome, top slab and/or "stack" of the manhole, including the manhole rims and covers, if present, to provide an open excavation which extends from ground surface to the bottom of the manhole.
- C. All liquids and sludge shall be removed from the manhole and placed immediately into approved liquid waste hauling vehicles for off-site disposal.
- D. For Manholes to be removed, the Contractor shall excavate and completely remove the manhole and associated drainage piping within 3 feet of the structure. Excavation of any visually stained soil or soil exhibiting elevated PID readings shall be accomplished as specified in Section 310000, Earthwork, as directed by the

Engineer. All contaminated soil excavated shall be disposed off-site in accordance with Section 021300, Waste Transportation and Disposal.

- E. The Contractor shall be responsible for all structural support, bracing, shoring, backfilling etc., necessary to prevent damage, to nearby structures scheduled to remain.
- F. Where directed by the Engineer, an endpoint sample shall be collected from the bottom of the excavation, as specified by Section 016520, Sampling Plan. No backfilling shall take place until approval of the endpoint sampling results by the Owner and, as applicable, the USEPA and NYSDEC. There shall be no claims for changes in Contract Time or Contract Price as a result of the Owner's, Engineer's, USEPA's or NYSDEC's review of endpoint sample results. Should the Contractor backfill the excavation prior to the approval of the endpoint sample results to maintain the integrity of the excavation, such work is at the Contractor's risk. Should additional excavation be required, all such backfill shall be removed and handled, as directed by the Engineer, at no additional cost to the Owner.
- G. Once the Contractor has obtained approval of the endpoint sample results, the excavation shall be backfilled unless the structure is to be replaced at the same location. Backfill and compaction shall be completed in accordance with the requirements specified in Section 310000, Earthwork.
- H. For manholes to be abandoned in place, the Contractor shall seal with grout all sewer lines entering or exiting the manhole and shall fracture the bottom of the manhole to expose the soil below. The remaining structure shall be backfilled. Backfill and compaction shall be completed in accordance with the requirements specified in Section 310000, Earthwork.

3.3 SEPTIC SYSTEM CLOSURE

- A. The Contractor shall remove the debris, and soil in the vicinity of the septic system to completely expose the septic tank and associated discharge piping.
- B. The Contractor shall remove the dome, top slab and/or "stack" of the septic tank, including the manhole rims and covers, if present, to provide an open excavation which extends from ground surface to the bottom of the septic tank.
- C. All liquids and sludge shall be removed from the septic tank and placed immediately into approved liquid waste hauling vehicles for off-site disposal.
- D. Where removal is indicated on the drawings or as directed by the Engineer, the Contractor shall excavate and completely remove the septic tank and associated drainage piping. Excavation of any visually stained soil or soil exhibiting elevated PID readings shall be accomplished as specified in Section 31000, Earthwork, as directed by the Engineer. All contaminated soil excavated shall be disposed off-site in accordance with Section 021300, Waste Transportation and Disposal.
- E. The Contractor shall be responsible for all structural support, bracing, shoring, backfilling etc., necessary to prevent damage, to nearby structures scheduled to remain.

- F. The septic tank(s) shall be removed and/or abandoned in place as indicated on the drawings. Where the drawings indicate the tank is to be abandoned in place the bottom slab of the septic tank(s) shall be completely broken-up to allow proper drainage. The septic tank(s) shall be backfilled and compacted in accordance with the requirements specified in Section 310000, Earthwork.
- G. Where directed by the Engineer, an endpoint sample shall be collected from the bottom of the excavation, as specified by Section 016520, Sampling Plan. No backfilling shall take place until approval of the endpoint sampling results by the Owner and, as applicable, the USEPA and NYSDEC. There shall be no claims for changes in Contract Time or Contract Price as a result of the Owner's, Engineer's, USEPA's or NYSDEC's review of endpoint sample results. Should the Contractor backfill the excavation prior to the approval of the endpoint sample results to maintain the integrity of the excavation, such work is at the Contractor's risk. Should additional excavation be required, all such backfill shall be removed and handled, as directed by the Engineer, at no additional cost to the Owner.
- H. Once the Contractor has obtained approval of the endpoint sample results, the excavation shall be backfilled unless the structure is to be replaced at the same location. Backfill and compaction shall be completed in accordance with the requirements specified in Section 310000, Earthwork.

3.4 FLOOR DRAIN / TRENCH DRAIN CLOSURE

- A. The Contractor shall remove all debris and soil in the vicinity of the floor drain to completely expose the extent of the drain.
- B. The Contractor shall remove all floor/trench drain covers.
- C. The Contractor shall prepare floor/trench drain surfaces as required to receive concrete fill.
- D. The Contractor shall fill floor/trench drains with concrete flush with the existing floor. Before filling trench drains any outlet piping shall be capped. Concrete shall be in accordance with Section 033010, "Cast-In-Place Concrete", and Section 036100, "Grouting and Patching."

END OF SECTION